



# REBUILD MASSACHUSETTS NEWS

*A Publication of the Rebuild Massachusetts Program  
The US Department of Energy (DOE) sponsors the Rebuild Massachusetts Initiative as part of their  
Rebuild America program.*

## ENERGY EFFICIENCY & CONSUMER SAVINGS TODAY AND INTO THE FUTURE

The Cape Light Compact (CLC) is a cooperative effort of 21 Cape and Island towns and two counties -- Barnstable and Duke. A Municipal Aggregation formed under MGL Chapter 164, §134 a, b, the Compact represents consumer interests in the emerging competitive markets for electricity. CLC provides consumers with an option to join together for purchase of power supply at reduced rates and an option for recovery of funds collected from Cape consumers by NSTAR, (formerly ComElectric) each year for energy efficiency, and application of those funds in locally-approved energy efficiency and conservation programs. [Read more about CLC's recent activities on page 2](#)

## MAKING A CITY ENERGY EFFICIENT

Few people realize that they have been singing about Medford since they were kids. In 1844, Lydia Maria Child described her journey across the Mystic River to her grandfather's house in the poem "*Over the River and Through the Woods*". Founded in 1630, Medford is the fourth oldest English settlement in America. In 1775, Paul Revere rode through Medford awaking citizens with "the British are coming!" James Pierpont wrote the Christmas Song "Jingle Bells" here. Medford is also the home to abolitionists Prince Hall, cooking school founder Fannie Farmer, and General Samuel Lawrence who fought at the battle of Bull Run. In addition to these accolades, Medford was the first municipal partner to join Rebuild Massachusetts. [Read about Medford's energy efficiency history and commitment to renewable energy on page 2.](#)



Photo by Andrew J. White



### **REBUILD MASSACHUSETTS PRESENTS INVESTMENTS IN ENERGY AND WATER CONSERVATION AT THE GLOBALCON CONFERENCE**

*Rebuild Massachusetts* recently conducted a half-day session at the 2003 Globalcon Conference presented by the Association of Energy Engineers [www.aeecenter.org/](http://www.aeecenter.org/) at the Hynes Auditorium. [Continued on page 4.](#)

## Cape Light Compact

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Thanks to **Cape Light Compact's** (CLC) highly successful, first-ever **Energy Fair** in October 2002, the residents of Cape Cod discovered new ways to reduce their energy consumption and save on their electric bills. Hundreds of consumers took advantage of the event to exchange old inefficient torchiere floor lamps and dehumidifiers for rebates on newer, safer and more efficient models.

In just five hours, the two extraordinary "turn-in" events exceeded expectations of CLC. The torchiere floor lamp "turn-in" yielded 225 inefficient torchieres, while the dehumidifier "turn-in" yielded 300 inefficient dehumidifiers. A \$90 rebate was funded in part by the Compact's energy efficiency program and by SEARS. Customers who turned-in non- ENERGY STAR® dehumidifiers received the rebate of \$90 upon purchase of one of two qualifying models at SEARS. Consequently, a total of 968 energy efficient lamps and fixtures were sold.

This event resulted in an estimated combined annual saving of over 287,655 kWh, including the lamps and fixtures sold and the torchieres and dehumidifiers turned-in.

"The tremendous success of the Energy Fair and torchiere and dehumidifier turn-ins ensures we'll make this an annual event," said Maggie Downey, Cape Light Compact Administrator. "This is a great opportunity to educate Cape Cod residents about energy conservation and new, energy-saving technologies."

Applied Proactive Technologies, Inc. (APT) of Springfield, MA organized the CLC Energy Fair. The fair introduced residents to a variety of energy efficient appliances and lighting that carry the Energy STAR® label, including refrigerators, dishwashers, clothes-washers, and lighting products. "We brought APT on board because they work closely with industries, manufacturers, utilities, government agencies, and retailers to develop and promote energy efficient products and programs," said Kevin Galligan, Program Manager for Cape Light Compact.

Downey praised APT for the successful launch of the Energy Fair attended by more than 1,500 residents. "We developed the Energy Fair to focus greater attention on energy and environmental issues," said Downey.

Fair attendees also participated in a contest to win one of three energy-efficient Maytag products including an ENERGY STAR® refrigerator, dishwasher, and clothes-washer. The fair featured exhibits promoting energy efficient products and the environment and several 'How-To-Clinics' for increasing efficiency in households.

This year CLC is hosting a first-ever Martha's Vineyard Energy Fair 2003 on Saturday, May 17, 2003 to include all of the elements of the 2002 Cape Cod Energy Fair plus a room air conditioner "turn-in" to encourage pre-season cooling changes.

Under the *Rebuild Massachusetts Program*, the NEEC/Peregrine Energy Group assisted CLC in profiling the energy use for the Barnstable County Courthouse buildings. CLC is following-up on an action plan to implement immediate savings through

lighting and HVAC retrofits as well as expanding the profiling of additional County buildings for future energy efficiency improvements.

Thanks to *Rebuild*, the County and the Compact launched the Compact's education efforts focusing on the development and implementation of an energy education program for the third, fourth, and fifth grades on the Cape and Vineyard. Partnering with Barnstable County's education department, **Cooperative Extension**, the Compact will introduce **the National Energy Education Development** ("NEED") project in the fall of 2003. The Cape and Vineyard are the first communities to offer the NEED project in Massachusetts. The NEED project satisfies the MCAS science curriculum for the targeted grade levels and will be an asset to teachers on the Cape and Vineyard. The Compact organized an Advisory Committee consisting of teachers, school administrators, Compact Board members, and staff to develop an implementation schedule. The Compact held two teacher workshops designed to introduce the NEED project, provide energy and conservation education, and to receive comments before the Fall, 2003 program rollout.

Finally, as a municipal aggregator in Massachusetts, the Compact has been able to provide competitive power supply, through a landmark *Pilot Project*, to over 43,000 default service customers, with a savings to consumers of approximately \$2 million in 2002. Hopefully, this project will serve as a precursor for competitive supply for all 193,000 electric customers on the Cape and Vineyard and pave the way for full competition in the future.

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## Medford

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Medford's energy efficiency history includes joining the Cities for Climate Change (part of the International Council for Local Environmental Issues) in August 1999. Medford is the first city in the Commonwealth with an approved 'Climate Action Plan'.

In September 1999, Medford formed its Energy Task Force to assist and support efforts to institutionalize energy efficiency as a tool for improving the community. Members of the Energy Task Force include representatives from Public Works, Buildings, Schools, Fire, Police, Engineering, Electric, Equipment, and the Medford Housing Authority along with electric and gas utility company representatives. Directing the committee's actions is the city's Environmental Agent, Kim Lundgren.

Based on the City's Climate Action Plan, the Energy Task Force developed a strategy of coordinating current and future energy efficiency improvements. Over the past several years, the City of Medford implemented various projects aimed at increasing efficiency and reducing emissions of greenhouse gases from municipal operations. With Rebuild Massachusetts' assistance, the City of Medford is beginning to benchmark building energy performance.

## Solar Energy

In September 2002, Medford reinforced its commitment to renewable energy by installing solar panels on Hormel Stadium. At minimal cost to the City, a local contractor, **Dagle Electrical and Contracting**, worked with municipal employees from the Electrical Department and the Department of Public Works to install the panels on the public stadium. The panels are expected to provide enough energy to power the new sporting lights for all of the night games of the Medford High School football team.

Medford City Hall is also utilizing solar energy for electricity generation. In 1999, the building underwent a conversion from heating oil to natural gas. Energy efficient lighting upgrades replaced magnetic ballasts with electronic ballasts. The conversion and lighting upgrade created an estimated reduction of 133 tons of equivalent carbon dioxide per year, reduced energy costs by more than \$7,000, and created a significant reduction in maintenance costs. Figure 1 depicts the changes.



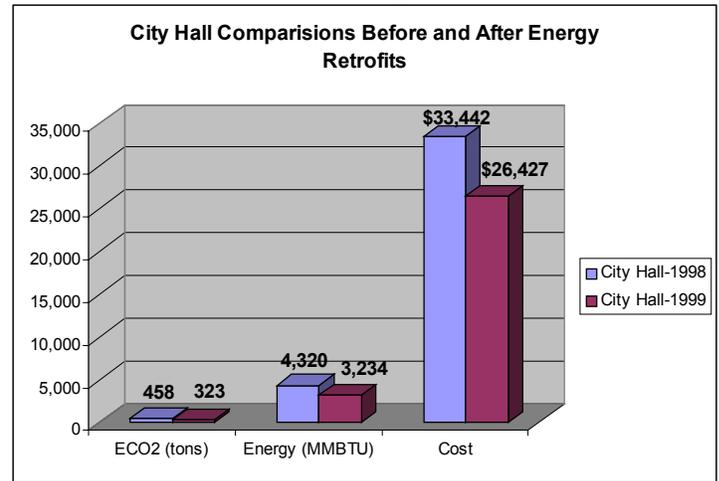
## Light Emitting Diodes

In April 2002, the City converted all traffic lights from incandescent bulbs to the more efficient Light Emitting Diodes (LEDs). The technology is expected to reduce energy use by 90 percent, lower maintenance due to an increased life of at least seven years, and incorporate innovations such as battery backup using photovoltaics.

In addition to the environmental benefits, there is an economic incentive for the City as well. Over 45 percent of the capital costs of the conversion will be returned to the City in the form of a rebate from Massachusetts Electric. With more efficient LEDs the estimated annual energy savings is \$27,600, providing a payback period of less than 21 months.

With assistance from the Division of Energy Resources Rebuild Massachusetts Program and Rebuild America resources from the U.S. Department of Energy, Medford is implementing its 'Climate Action Plan', creating a energy baseline and devising a system to record, analyze and report energy use and costs. Once the information is gathered, the city will prioritize the building retrofits based on an annual efficiency index.

Figure 1: Energy and Emission Changes  
Medford City Hall



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## REBUILD MASSACHUSETTS PRESENTS – INVESTMENTS IN ENERGY AND WATER CONSERVATION



Chairing the session was **Mike Sherman**, representing the **Northeast Energy Efficiency Council** ([www.neec.org](http://www.neec.org)). Mike introduced the Rebuild America Program sponsored by the U.S. Department of Energy, the Rebuild Boston Partnership, and the transition to Rebuild Massachusetts.

**Kim Lundgren**, Environmental Agent for Medford and **Kate Bennett**, Director of Planning at the Boston Housing Authority provided local partnership representation.

Ms. Lundgren directs Medford's Energy Task Force. The City of Medford joined the Rebuild Massachusetts Program in March 2002. The initial vision of this partnership is to increase energy efficiency in both the Municipal and the community level. Lundgren discussed the tools and strategies the City uses to accomplish these goals, gave examples of completed projects and assistance provided by the Rebuild Program. ([See previous article](#))

Kate Bennett has been with the Boston Housing Authority for over three years. In her role as Director of Planning, she oversees several strategic initiatives for the Authority, including the development of the annual and five-year Agency Plans, over \$20 million in energy conservation initiatives, and coordination within the BHA for the Healthy Public Housing project--a \$2 million community-based research effort focused upon the connections between housing conditions and resident health.

Also presenting was **Eileen McHugh** from the Massachusetts Division of Energy Resources. Eileen is the Project Leader for the Rebuild Massachusetts Program. Her work at DOER includes management of a state grant program for energy efficiency capital upgrades in public schools, municipal energy efficiency programs, municipal aggregation for competitive power purchasing, and performance contracting. "The Rebuild America Program fits into the agencies overall goals to maintain adequate supplies of reliable, affordable, and sustainable energy and demonstrates how investments in energy efficiency not only saves money to reinvest in other areas, but also reduces greenhouse gas emissions", McHugh said.

You may view their presentations at [www.mass.gov/doer](http://www.mass.gov/doer).

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